February 28, 2005

Mr. Jeff Lux, Project Manager Kerr-McGee Corporation Cimarron Corporation P.O. Box 25861 Oklahoma City, OK 73125

SUBJECT: SUMMARY OF NOVEMBER 10, 2004 MEETING REGARDING GROUNDWATER REMEDIATION AT THE CIMARRON FACILITY IN CRESCENT, OKLAHOMA

Dear Mr. Lux:

Enclosed is a summary of the subject meeting. If you have any questions regarding this letter, please contact me at (301) 415-6664 or by e-mail at klk@nrc.gov.

Sincerely,

/RA/

Kenneth L. Kalman, Project Manager Materials Decommissioning Section Division of Waste Management and Environmental Protection Office of Nuclear Material Safety and Safeguards

Enclosure: Summary of 11/10/04 Meeting

Docket No. 70-925 License No. SNM-928

cc: Cimarron distribution list

Cimarron Corporation Distribution List:

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Mike Broderick Radiation Management Section Waste Management Division Department of Environmental Quality 707 North Robinson Oklahoma City, OK 73102-6087 Mr. Jeff Lux, Project Manager Kerr-McGee Corporation Cimarron Corporation P.O. Box 25861 Oklahoma City, OK 73125

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Revised Summary of 11/10/04 Meeting

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OFC:	DWMEP*	DWMEP*	DWMEP*	DWMEP
NAME:	KKalman	TMixon	KGruss	DGillen
DATE:	2/09/05	2/09/05	2/28/05	02/28/05

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SUMMARY OF NOVEMBER 10, 2004 NRC/CIMARRON MEETING REGARDING GROUNDWATER REMEDIATION AT THE CIMARRON FACILITY

Attendees

NRC

Kimberly Gruss, DWMEP Ken Kalman,DWMEP Robert L. Johnson, DWMEP Jon Peckenpaugh, DWMEP John Bradbury, DWMEP David W. Nelson, DWMEP Marjorie Rothschild, OGC Tom Nicholson, RES

Cimarron

Jeff Lux Karen Morgan Roy Widman Steve Marshall Robert Berry Michael Meenan Jim Harrington

Oklahoma Department of Environmental Quality

Morning session
Evelina Morales
Martha Penisten
Jerry Matthews
David Cates

Afternoon session
Evelina Morales
Jerry Matthews
David Cates
Ray Roberts

Summary

On November 10, 2004, the U.S. Nuclear Regulatory Commission (NRC) staff met with representatives of Cimarron Corporation at NRC Headquarters, in Rockville, MD, to discuss outstanding license amendment requests, documents needed from NRC and Cimarron's plans for groundwater remediation at the Cimarron site. Staff from NRC Region IV as well as the Oklahoma Department of Environmental Quality (ODEQ) also participated in the meeting via telephone. Cimarron staff had requested this meeting to discuss technical issues related to remediation of the uranium (U) plume, regulatory issues concerning remediation of contaminated areas, outstanding license amendment requests and documents needed from

NRC As requested by NRC, Cimarron provided an agenda for the meeting in advance which is included as Attachment 1.

NRC staff began the meeting with a recapitulation of the May 4, 2004 meeting. During the May meeting between NRC and Cimarron, statements were made by the NRC staff regarding the groundwater release criteria for the site (180 pCi/l for total uranium and the NRC derived concentration limit of 3,790 pCi/l for Technetium-99 (Tc-99)) and the NRC's intent to keep the Cimarron site under SDMP criteria regardless of the remediation technology. However, based on its legal research of 10 CFR 70.38 and other regulations, the NRC staff noted that Cimarron's use of remedial actions not specifically covered in the approved Decommissioning Plan (DP) may trigger the use of License Termination Rule (LTR) Criteria. The NRC staff will research this further and provide its findings to Cimarron, as this will factor into Cimarron's plans for remediation. NRC staff committed to providing the revised May 4, 2004 meeting minutes to Cimarron for their review and comment, which incorporated Cimarrons proposed modifications.

NRC staff provided information regarding the use of institutional controls and the regulatory treatment of institutional controls under the LTR and new Commission policy for institutional controls as described in NRC Regulatory Issue Summary 2004-08, dated May 28, 2004. This discussion covered such topics as the risk informed graded approach, NRC Long Term Control license, legal agreement and deed restriction with an NRC monitoring and enforcement role, dose assessment, public involvement, financial surety, monitoring and release criteria for restricted use sites.

Cimarron staff discussed the results of its August-September 2004 groundwater sampling data and asked if NRC had received final results from ORISE regarding the NRC's samples. NRC staff said that it has not received the final data but will look into it and provide the final data to Cimarron.

Cimarron staff then provided a slide presentation regarding the evaluation of the following groundwater remediation strategies: Bioremediation, Excavation, Natural Attenuation, and the development of a new ACL. Institutional controls were discussed by NRC. NRC agreed that institutional controls were potentially applicable to one or more of the four options listed above. For each strategy, Cimarron identified the issues for which Cimarron desires feedback from both NRC and ODEQ. Cimarron explained that this feedback is critical to the selection of an appropriate remediation strategy. NRC and ODEQ agreed to participate in technical exchanges with Cimarron to provide guidance to Cimarron relative to groundwater remedial approaches, to develop a consensus on what technical issues would need to be addressed for these approaches and what would be required to resolve them.

<u>Actions</u>

Several follow-up items were identified as a result of the meeting and are summarized as follows:

NRC technical and legal staff will discuss whether Cimarron would fall under the LTR if a
technology other than natural attenuation is utilized. During the February 17, 2005 monthly
telecon, NRC staff informed Cimarron that any technology other than natural attenuation will
require a revised decomissioning plan and would fall under LTR criteria.

- 2. NRC's decommissioning guidance in NUREG-1757, regarding the use of institutional controls will be revised for the new policy options in accordance with the RIS. Draft guidance is scheduled for September 2005 and Final guidance for September 2006. Meanwhile, NRC staff agreed to holding future discussions with Cimarron to answer Cimarron's questions regarding the use of institutional controls. This was done during the December 16, 2004 meeting with Cimarron.
- 3. NRC will clarify the 5/4/04 meeting minutes as requested by Mr. Peckenpaugh to eliminate confusion (i.e. fifth paragraph, last sentence). The revised meeting minutes were sent to Cimarron in February 2005.
- 4. NRC will provide ORISE data from Cimarron August 2004 sampling event as soon as it is received from ORISE. This was done in early February 2005.
- 5. NRC will discuss with ODEQ the remediation strategies that Cimarron is considering and the regulatory considerations. This was done on December 22, 2004. Additional discussion is anticipated during the upcoming technical exchanges with Cimarron.
- 6. NRC agreed to initiate a technical exchange between NRC, ODEQ and Cimarron to address the specific issues associated with the conceptual models for the site and the groundwater remediation options presented during the meeting. The first technical exchange is scheduled for February 22, 2005.

At the end of the meeting, NRC staff distributed the NRC Public Meeting Feedback form to the attendees and telefaxed the Feedback form to ODEQ to obtain its input.

Attachment 1

NRC – Cimarron Meeting Agenda SNM-928 License and Decommissioning Issues November 10, 2004

- 1. Documents from NRC
 - a. Recap from May 4, 2004 meeting with NRC
 - b. NRC comments on Well 1319 assessment report
 - c. NRC comments on Tc-99 assessment report
- 2. License Amendments from NRC (schedule)
 - a. License condition 27(e)
 - b. License condition 22
 - c. License condition 23
- 3. Groundwater Remediation
 - a. August September groundwater sampling data
 - b. Presentation by ENSR/Cimarron
 - 1. Evaluation of potential groundwater remediation strategies
 - 2. Preferred remedial strategies
 - c. Discussion of information needed for selected technologies/areas
 - 1. Bioremediation
 - 2. Excavation
 - 3. Natural attenuation
 - 4. Institutional controls
 - d. Develop plan for path forward
- 4. Review follow-up items